

#### ABSTRACT OF THE DISCLOSURE:

A sensor for determining flow rate of a fluid includes a thermistor inserted into a volume through which the fluid flows. The thermistor cycles between its zero-power mode and its self-heated mode. In the zero-power mode, the thermistor is used to determine the ambient  
5 temperature of the fluid. In the self-heated mode, the thermistor is used to determine the amount of heat removed by the fluid. The ambient temperature of the fluid, the amount of heat removed by the fluid, and the thermal properties of the fluid are then utilized to determine the flow rate of the fluid.